



## A LITTLE COMMON SENSE—PLEASE

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### Accidents Don't Just Happen, They Are Caused

The Highway Transportation system is composed of three major elements:

1. the driver,
2. the vehicle, and
3. the road



In most cases where accidents occur, the cause can be attributed to one or more of these elements. **The majority of accidents relate directly to the driver.** A good driver takes interest and pride in the care and operation of his/her vehicle. The driver knows and observes all traffic laws and respects the rights and safety of others. As a result, such drivers have a much better chance of never becoming involved in a serious traffic accident.

The poor or careless driver all too often neither cares for the vehicle he/she drives, seldom observes traffic laws and has little respect for the rights and safety of others.

As a result of poor driving habits there are approximately 160,000 accidents reported to the Department of Safety annually.

#### 1. THE DRIVER: Be in Shape to Drive

Human error is the single most common cause of traffic crashes. The leading factors in crashes are:

- Excessive Speed
- Lack of Concentration
- Improper Evasive Action

Driving safely is not always easy. In fact, it is one of the most complex things that people do and one of the few things we do regularly that can injure or kill us. It is worth the effort to be a careful driver.

Being a safe driver takes a lot of skill and judgment. This task is even more difficult when you are just learning to drive. Every one of the abilities you have can easily be required to drive safely. If anything happens so you are not up to your full ability, you may not be a safe driver. Your ability to be a safe driver depends on ability to see clearly, not being overly tired, not driving while on drugs, being generally healthy and being emotionally fit to drive. **In other words, being in "shape" to drive safely.**

Your mental and emotional state, as well as your physical condition, affects the way you drive a vehicle. Anger, worry, frustration, fatigue and minor illnesses such as a cold are a few of the temporary conditions that can make you an unsafe driver.

#### **VISION**

Good vision is a must for safe driving. You drive based on what you see. If you cannot see clearly, you will have trouble identifying traffic and road conditions, spotting

potential trouble or reacting in a timely manner.

Vision is so important that Tennessee requires that you pass a vision test before you get a driver license. This test measures that you have at least 20/40 vision in at least one eye, with or without corrective lenses.

**Side Vision** — You need to see "out of the corner of your eye". This lets you spot vehicles and other potential trouble on either side of you while you look ahead. Because you cannot focus on things to the side, you also must use your side mirrors and glance to the side if necessary.

**Judging Distances and Speeds** — Even if you can see clearly, you still may not be able to judge distances or speeds very well. In fact you are not alone, many people have problems judging distances and speeds. It takes a lot of practice to be able to judge both effectively. It is especially important in knowing how far you are from other vehicles and judging safe gaps when merging and when passing on two-lane roads, or when judging the speed of a train before crossing tracks

**Night Vision** — Many people who can see clearly in the daytime have trouble seeing at night. It is more difficult for everyone to see at night than in the daytime. Some drivers have problems with glare while driving at night, especially with the glare of oncoming headlights. If you have problems seeing at night, don't drive more than is necessary and be very careful when you do drive at night.

**Because seeing well is so important to safe driving, you should have your eyes checked every year or two by an eye specialist. You may never know you have poor vision unless your eyes are tested.**

#### **When required to wear glasses or contact lenses, remember to:**

- ✓ Always wear them when you drive, even if it is only to run down to the corner. If your driver license says you must wear corrective lenses, and you do not wear them when driving; you could be fined and receive a ticket.
- ✓ Keep an spare pair of glasses in your vehicle. If your regular glasses are broken or lost, you can use the spare to drive safely.
- ✓ Avoid using dark glasses or tinted contact lenses at night, they cut down the light you need to see clearly.

#### **HEARING**

Hearing can be helpful to safe driving. The sound of horns, a siren or screeching tires can warn you of danger. Hearing problems, like bad eyesight, can come on so slowly that you do not notice it easily. Drivers who know they are deaf or have hearing problems can adjust and still be safe drivers. These drivers learn to rely more on their vision and tend to stay more alert. Studies have shown that the driving records of hearing-impaired drivers are just as good as those drivers with good hearing.

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## **FATIGUE**

You cannot drive as safely when you are tired as when you are rested. You do not see as well, nor are you as alert. It takes you more time to make decisions and you do not always make good decisions. You can be more irritable and can get upset more easily. When you are tired you could fall asleep behind the wheel and crash, injuring or killing yourself or others.

### **Things you can do to help from getting tired on a long trip.**

- Try to get a normal night's sleep before you leave.
- Do not leave on a trip if you are already tired. Plan your trips so you can leave when you are rested.
- Do not take any medicine that can make you drowsy.
- Eat lightly. Do not eat a large meal before you leave.
- Take breaks. Stop every hour or so or when you need to. Walk around, get some fresh air and have some water, coffee, soda or juice. The few minutes spent on a rest stop can save your life. Plan for plenty of time to complete your trip safely.
- Try not to drive late at night when you are normally asleep. Your body thinks it is time to go to sleep and will try to do so.
- Never drive if you are sleepy. It is better to stop and sleep for a few hours than to take a chance you can stay awake. If you fail to stay awake it could become a real nightmare.

## **HEALTH**

Many health problems can affect your driving – a bad cold, infection or virus. Even little problems like a stiff neck, a cough or a sore leg can affect your driving. If you are not feeling well and need to go somewhere, let someone else drive.

### **Some health conditions can be very dangerous:**

- **Epilepsy** – So long as it is under medical control, epilepsy generally is not an obstacle to driving. In Tennessee, you may drive if you are under the care of a doctor and have been seizure free for a minimum of six months.
- **Diabetes** – Diabetics who take insulin should not drive when there is any chance of an insulin reaction, blackout, convulsion or shock. Such a situation could result from skipping a meal or from taking the wrong amount of insulin. It also might be a good idea to have someone else drive for you during times when your doctor is adjusting your insulin dosage. If you have diabetes you also should have your eyes checked regularly for possible night blindness or other vision problems.
- **Heart Condition** – People with heart diseases, high blood pressure or circulation problems or those in danger of a blackout, fainting or a heart attack should not get behind the wheel. If you are being treated by a doctor for a heart condition, ask if the condition could affect your driving.

## **EMOTIONS**

Emotions can have a great affect on your driving safely. You may not be able to drive well if you are overly worried, excited, afraid, angry or depressed.

- If you are angry or excited, give yourself time to cool off. If necessary take a short walk, but stay off the road until you have calmed down.
- If you are worried, down or are upset about something, try to keep your mind on your driving. Some find listen to the radio helps.
- If you are impatient, give yourself extra time for your driving trip. Leave a few minutes early. If you have plenty of time, you may not tend to speed or do other things that can get you a traffic ticket or cause a crash. Don't be impatient to wait for a train to cross in front of you. Driving around lowered gates or trying to beat the train can be fatal.

## **ALCOHOL and DRUGS**

Alcohol is involved in about 40% of the traffic collisions in which someone is killed. If you drink alcohol, even a little, your chances of being in a collision are much greater than if you did not drink any alcohol (or drugs). No one can drink alcohol and drive safely, even if you have been driving for many years. **DRIVING SHOULD ALWAYS BE A DRUG AND ALCOHOL FREE ZONE.**

You should fully review Chapter Five of this manual for full details on Tennessee's laws and penalties regarding drinking and driving.

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## **2. THE VEHICLE: Maintenance is a Must**

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Driving safety starts with the vehicle you are driving. ***It is the duty of drivers to make certain that the vehicles they drive are safe to operate.***

A poorly maintained vehicle can break down or cause a collision. If a vehicle is not working well, you might not be able to get out of an emergency situation. A vehicle in good working order can give you an extra safety margin when you need it most.

You should follow the recommendations in your vehicle owner's manual for routine maintenance.

### **CHECK THE VEHICLE**

- ✓ **Braking System** – Only your brakes can stop your vehicle. It is very dangerous if they are not working properly. If they do not seem to be working good, are making a lot of noise, smell funny or the brake pedal goes to the floor, have a mechanic check them.
- ✓ **Lights** – Make sure that turn signals, brake lights, taillights and headlights are operating properly. These should be checked from the outside of the vehicle.
- ✓ **Battery** – Car batteries tend to run down more rapidly in cold or damp weather. A neglected battery may leave you stranded with a vehicle that will not start.
- ✓ **Jumper Cables** – In the event your vehicle's battery becomes run down, jumper cables may help get you started. It is a prudent idea to keep a set of cables in your vehicle. See the vehicle manual for proper use to prevent vehicle damage or personal injury.

- ✓ **Windshield and Wipers** – Damaged glass in a windshield can easily break in a minor collision or when something hits the windshield. Have a damaged windshield repaired or replaced

Windshield wipers keep the rain and snow off the windshield. Some vehicles also have wipers for rear windows and headlights. Make sure all wipers are in good operation condition. If the blades are not clearing your windshield, replace them.

Windshield washer solution – Non-freezing windshield washer fluid is essential for cleaning the windshield of debris, salt, and grime when driving in inclement weather. Get in the habit of checking the washer fluid level with each gas fill-up and/or adding more solution with each oil change.

It is important that you are able to see clearly through the windows, windshield and even your mirrors. ***The following are things you can do to help:***

- Keep the windshield clean. Bright sun or headlights on a dirty windshield make it hard to see. Get in the habit of cleaning the windshield each time you stop to put gas into your vehicle.
- Keep the inside of your windows clean, especially if anyone using the vehicle smokes. Smoking causes a film to build up on the inside of the glass. Carry liquid cleaner and a paper or cloth towel so you can clean you windshield whenever it is necessary.
- ✓ **Heater / Defroster** – A working heater/defroster keeps the vehicle's windows free of fog and ice and helps maintain comfortable driving conditions.
- ✓ **Tires** – Worn or bald tires can increase your stopping distance and make turning more difficult when the road is wet. Unbalanced tires and low pressure cause faster tire wear, reduce fuel economy and make the vehicle harder to steer and stop.

Worn tires can cause hydroplaning, and increase the chance of a flat tire. Check the tire pressure often with an air pressure gauge (a good idea is to keep a gauge in your glove box since they are no larger than your average ink pen). Check the vehicle manual or the side of the tires for the proper pressure rate.

Check the tread with a penny. Stick the penny into the thread headfirst. If the tread does not come at least to Lincoln's head (2/32 inch), the tire is illegal and unsafe and you need it replaced. **Don't forget the spare tire!** The spare should be checked and maintained periodically in case it is needed in an emergency.

- ✓ **Steering System** – If the steering is not working properly, it is difficult to control the direction you want to go. If the vehicle is hard to turn or does not turn when the steering wheel is first turned, have the steering checked by a mechanic.
- **Never turn your vehicle's ignition to the "lock" position while the vehicle is in motion. This will cause the steering wheel to lock in place and you will lose control of the vehicle.**
- ✓ **Suspension System** – Your suspension helps you control your vehicle and provides a comfortable ride over varying

road surfaces. If the vehicle continues to bounce after a bump or a stop, or is hard to control, you may need new shocks or other suspension parts. Have a mechanic check the vehicle for suspension problems.

- ✓ **Exhaust System** – The exhaust system helps reduce the noise from the engine, cools the hot gases coming from the engine, and moves them to the rear of the vehicle. **Gases from a leaky exhaust can cause death inside a vehicle in a very short time.**

If you ever start to notice that you and/or your passengers tend to get a sleepy feeling when driving or riding in your car you may have an exhaust leak that needs to be repaired immediately.

Never run the motor in a closed garage. When sitting for prolonged periods in a vehicle with the motor running (idling), open a window to provide fresh air. Some exhaust leaks are easily heard but many are not – **have the system checked periodically.**

- ✓ **Engine** – A poorly running engine may lose power that is needed for normal driving and emergencies, may not start, gets poor fuel economy, pollutes the air and could stall when you are on the road causing you and other vehicles a traffic problem. Follow the procedures recommended in the owner's manual for maintenance.
- ✓ **Engine Cooling System** – Antifreeze/coolant level should be checked periodically to ensure proper levels as recommended by your vehicle owner's manual. Improperly maintained levels can result in overheating in warm weather or engine freezing during winter. Be careful to check your radiator **ONLY** when the vehicle is cool, not immediately after operation.
- ✓ **Loose Objects** – Make sure that there are no loose objects in the vehicle that could hit someone in the event of a sudden stop or crash. Make sure there are no objects on the floor that could roll under the brake pedal and prevent you from stopping the vehicle. Also check the outside of the vehicle to ensure that there are no loose parts that could come off in traffic and create a safety hazard.
- ✓ **Horn** – The horn may not seem like it is important for safety, but as a warning device, it could save your life. **ONLY use your horn as a warning to others.**
- ✓ **Fuel** – Be sure your vehicle always has at least a half tank of gas before starting any trip of significant length. Running out of gas on the roadway can be dangerous and could cause traffic jams or accidents.

### **3. THE ROAD: Rules, Conditions & Traffic**

A safe and defensive driver never really stops learning "the road". The "road" is a continually evolving portion of the highway transportation system. In order for a driver to develop a thorough understanding of the road you must:

- ❑ Study and learn the rules of the road. Studying this manual is the first step to accomplishing this task. However good drivers don't just study for a driving test and then never pick up a driving manual again. Good drivers periodically review the manual for the newest law changes and safety information and study the manual for



any new state they move to whether or not a test is required to transfer their license to that state.

- ❑ Be aware of the various road conditions you may encounter when driving. Driving safely means obeying speed limits and adjusting for road conditions. There are various road conditions where you must slow down to be safe. For example, you must slow down for a sharp curve or when the road is rough or damaged

**Again the road condition is a topic that you should never expect to stop learning about.** In all states, the Department of Transportation is continually improving road designs in attempts to make driving safer. This means that as new ideas are implemented (such as HOV lanes or rumble strips) there will be new conditions regarding the road that drivers will need to become familiar with.

- ❑ Be prepared for traffic conditions. Traffic is another factor that about the road that is always changing. Chapter 14 of this manual gives you information on sharing the road with various types of traffic including road construction and maintenance vehicles. Traffic conditions vary according to many factors:

- Volume of vehicles
- Types of traffic control devices
- Accidents or work zones
- Road type (interstate, rural, city, etc.)
- Weather conditions
- Speed limits

Vehicles moving in the same direction at the same speed cannot hit one another. Collisions involving multiple vehicles often happen when drivers go faster or slower than other traffic.

**Traffic Trouble Spots** – Wherever people or traffic gather, your room to maneuver is limited. You need to lower your speed to have time to react in a crowded space. **Some situations where you may need to adjust speed for traffic conditions include:**

- If you see brake lights coming on several vehicles ahead of you.
- Shopping centers, parking lots and downtown areas – these are busy areas with vehicles and people stopping, starting and moving in different directions quickly and randomly.
- Rush hours often have heavy traffic and drivers that always seem to be in a hurry.
- Narrow bridges and tunnels – vehicles approaching each other are closer together.
- Toll Plazas – vehicles are changing lanes and preparing to stop and then speeding up again when leaving the plaza. The number of lanes could change both before and after the plaza.
- Schools, playgrounds and residential streets – these areas often have children present. Always be alert for children crossing the street or running or riding into the street without looking.
- Railroad crossings – you need to make sure that there are no trains coming and that you have room to cross. Some

crossings are bumpy so you need to slow down to safely cross.

## **BEING READY FOR THE DRIVING TASK**

Throughout this chapter we have discussed ways to determine that both you and your vehicle are in safe shape for driving. Also we covered the importance of knowing the road and traffic conditions. While all this information is vital for new drivers to develop the knowledge or safe driving; no driver manual can teach you how to operate a vehicle or ensure that you are a safe driver. **Becoming a safe driver requires skills you can only gain through instruction and practice.** As a final review the following tips will help you as you begin to develop safe driving skills while you practice and learn the actual “driving task” with your learner permit or GDL.

- **STARTING:** Check the vehicle owner’s manual to determine the proper way to start the vehicle. Make sure the parking brake is on before you start any manual transmission vehicle. Vehicles with manual transmissions must not be in gear and in some newer vehicles the clutch must be depressed before the vehicle will start. For a vehicle that has an automatic transmission, you must ensure that the gearshift selector is in the “PARK” position.

You should always check the position of the seat AND mirrors before you start to drive. Make any necessary adjustments before you move the vehicle.

- **PROPER DRIVING POSTURE:** You will be driving more effectively, safer and with less fatigue if you are comfortable, your body is well-aligned in your seat, you are the proper distance from the steering wheel, pedals, and if you can use your mirrors to the best advantage.
  - Adjust the seat to a comfortable upright position so you can reach the pedals easily and have good clear vision through the windshield and each side window and all mirrors. **DO NOT DRIVE WITH THE SEAT IN A RECLINED OR SEMI-RECLINED POSITION.** This is dangerous, reduces your vision and thus your ability to react to emergency situations.
  - You should sit so you can touch the floor below the brake pedal with your feet.
  - Do not move the seat so far forward that you cannot easily steer. You should sit at least 10 to 12 inches from the steering wheel so the air bag will hit you in the chest if there is a collision. Sitting closer could result in serious head or neck injuries from the air bag hitting you in the chin or face.
  - Head restraints are designed to prevent whiplash if you are hit from behind. They should be adjusted so the head restraint contacts the back of your head.
  - Use a solid, firm grip on the steering wheel; you should always drive with BOTH hands on the wheel.
  - Don’t drive with you elbow or arm propped on the door or out the window. You don’t have full control of the steering wheel and a sideswipe collision could take off your arm.

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- **USE SEAT BELTS AND CHILD RESTRAINTS:**

Fasten your seat belt (both lap and shoulder if separate belts) and make sure all your passengers are using safety belts or child restraints before you begin driving.

- You may have to pay a fine if you or your passengers under 16 are not wearing a seat belt or are not secured in a child car seat or booster seat. Refer to Chapter 7 for specific details on Tennessee's seat belt and child protection laws.
- **ADJUST YOUR MIRRORS:** You need to adjust all three of your rear view mirrors so that you get the widest view possible while keeping your blind spots to a minimum. You should wait to adjust your mirrors after you have your seat adjusted correctly, but always before you begin driving.
  - **Interior rearview mirror** – The position for the inside rearview mirror should allow the driver to see fully out of the rear window from the driver's seat. To get the smallest blind spot at the right side of the car, turn your inside mirror so you can see the edge of your right rear window post.
  - **Exterior rearview mirrors** – To eliminate as much "blind spot" area as possible adjust the side-view mirrors just beyond the point where you could see the side of the car on the inside edge of the mirror. With this setup, you almost completely solve the blind spot problem. When you lean slightly backward in your seat, if you see more than a glimpse of the rear corners of your car in your outside mirrors they are turned too far inward and you should adjust them outward.
  - To make sure your mirrors are in the correct position, let a car behind pass you on the left. As it passes out of view in your inside mirror you should see it's front bumper in your outside driver-side mirror.
  - Even with properly adjusted mirrors, always turn your head and check blind spots when you want to turn or change lanes.

- **USING A STANDARD TRANSMISSION:** With a standard or manual transmission, you can control the gear-speed ratio and use your gears, rather than your brakes, to help slow down your car. The following techniques for smooth shifting will help you handle driving vehicles with standard transmissions.

- Hold the clutch pedal all the way down when starting, shifting gears, and when your speed drops below 10 M.P.H. as you're coming to a stop.
- Don't "ride the clutch", meaning don't drive with your foot resting on the clutch pedal.
- Practice to get smooth coordination in using the clutch and accelerator pedals.
- Don't coast with the gears in neutral (it's illegal) or with the clutch pedal pushed down except when shifting gears.
- In going down steep hills, place car in a lower gear.

- **USING AN AUTOMATIC TRANSMISSION:** With automatic transmissions the driver usually does not need to change gears. The vehicle is put in "R" for reverse when you want to back-up and in "D" for drive when you want to drive forward. (Some newer cars have an "O" gear selection for overdrive, which is generally for use when driving on interstates or other expressways where there is very little stop, and go traffic.) Most automatic transmissions also have lower gears that will be indicated by an "L", "2", or "1" on the gearshift indicator. These gears are generally not used except for special or emergency situations such as:

- Driving down steep mountain grades.
- Slow speed driving on icy or other slippery roads.
- Emergency deceleration if you have brake failure.

**NEVER** move your car until you have looked in front, behind and to the side for pedestrians and oncoming traffic. Then, signal and pull into traffic when safe.